

Best Practices for Water Quality Trading

Project update *August 2013*



How Willamette Partnership got interested in trading



Increasing the Pace, Scope, Effectiveness of Conservation

Working at the Intersection of Environment and Human Needs

Water Quality Trading

An Evolution

- Markets in the 1980s and 1990s
- Over 75 pilots started, 24 actively trading
- Intense interest from EPA and USDA



Water Quality Trading

An Evolution in the Northwest too

- Lower Boise program in the 1990s
- Clean Water Services permit in OR in early 2000s
- WA explores trading in Spokane 2005-2010
- Medford permit in OR, Lower Boise TMDL, Klamath TMDL, etc.



Tualatin River, Oregon

Restoration for compliance, converting...

Cooling Towers

\$60 -
\$150
million

35 miles of restoration
Additional instream flow

\$6
million

FROM THIS...



...TO THIS

Source: Adapted from The Freshwater Trust

Summer, 2004



Summer, 2007



Summer, 2010



Three Keys to Success

For trading programs

- **CLEAR DEMAND:** Law/regulation, businesses, or funders that are on board
- **CLEAR PATH:** Approved standards and protocols for measuring ecosystem services and implementing credit-generating projects
- **CLEAR RISK:** Third parties willing to finance and deliver compliance-grade projects



Standards, Metrics, and Process

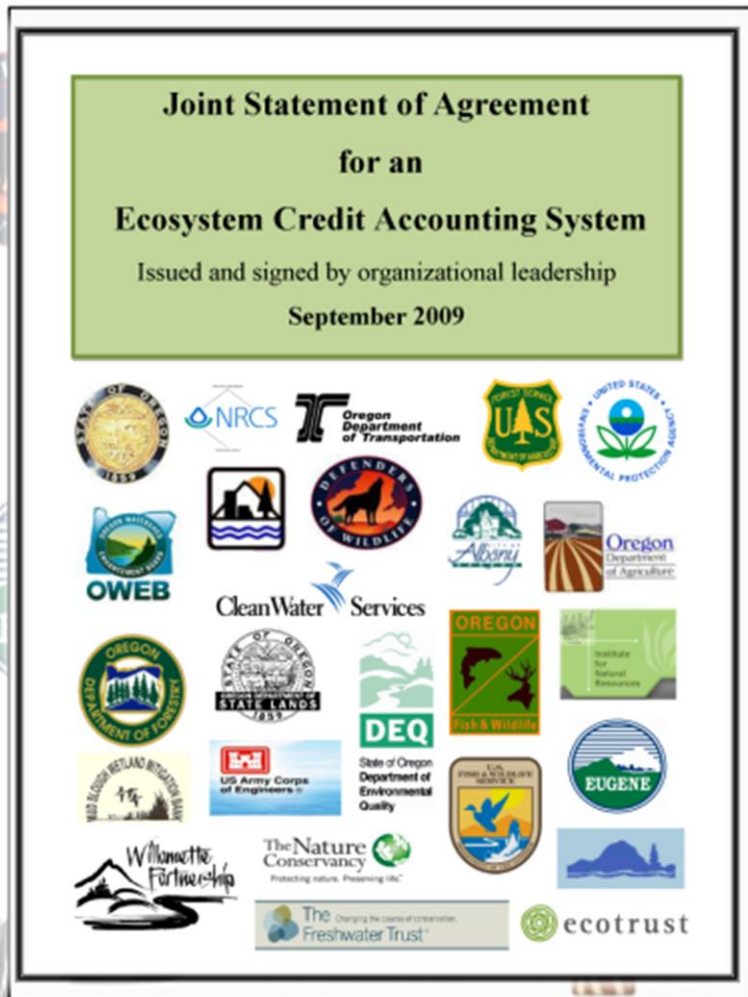
Crediting protocol approved for use

Freshwater
Trust™

cotrust

**US Army Corps
of Engineers.**

CleanWater Services
Our commitment is clear.

TheNature 

Department

Rogue River, Oregon

With demand, infrastructure, and risk

Cooling Towers

>\$20
million

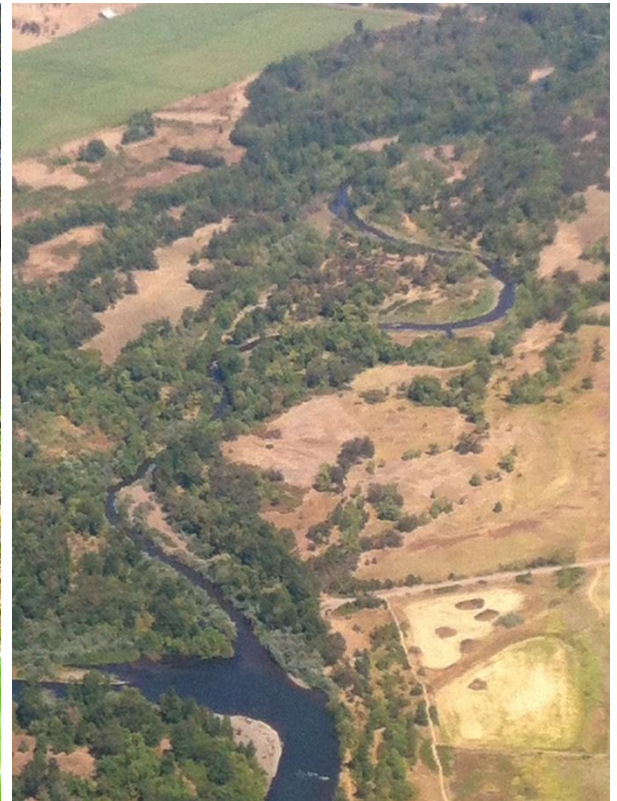
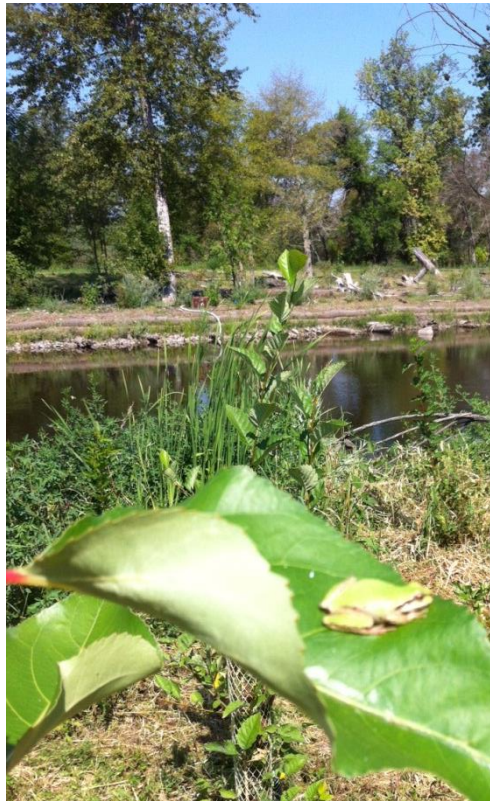
Holding Pond

\$16
million

30+ miles of restoration

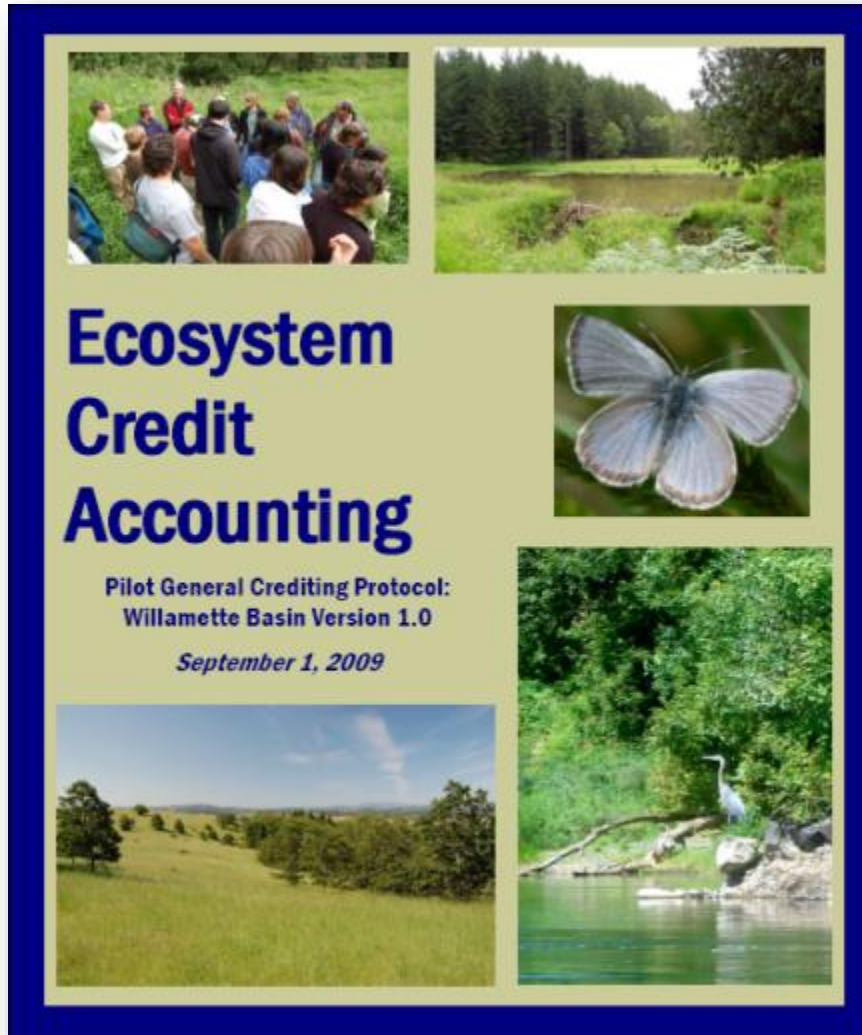
\$8
million

FROM THIS...



Crediting Protocol

Standards, Metrics, and Process



Validate



Calculate



Verify



Register



Track

Denman Wildlife Area

Riparian revegetation

Validate



- ☑ **Additional**
 - Ownership
 - Legal Requirements
 - Rights to Credits
- ☑ **Suitable**
 - Project Design
 - Planting Plan
 - Riparian Standards
- ☑ **Sustainable**
 - Stewardship
 - Costs
 - Legal Protection

Crediting Protocol

Quantification = Translation = Investment

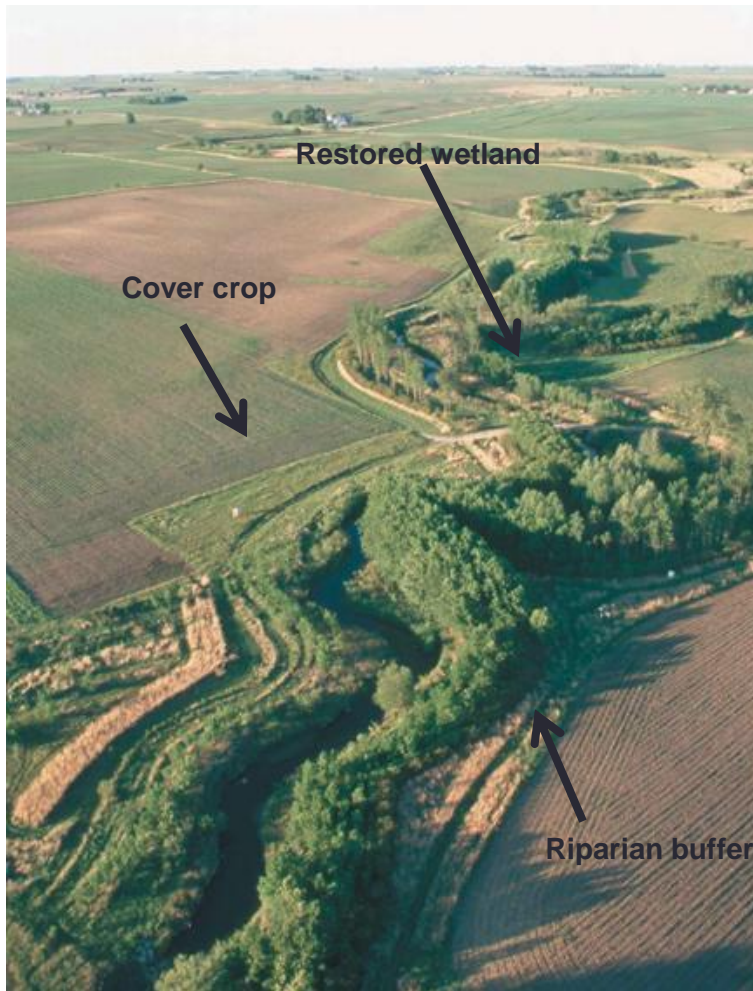


What did you do?
Validate

- Trees planted
Calculate
- Stream miles/acres
treated
 - ☐ Baseline
 - ☐ Restoration
- Kilocalories

Crediting Protocol

Quantification = Translation = Investment



What did you do?

- Practices installed
- Acres treated
- Lbs of Nitrogen, Phosphorus, Sediment

Denman Wildlife Area

Riparian revegetation



Validate



Calculate



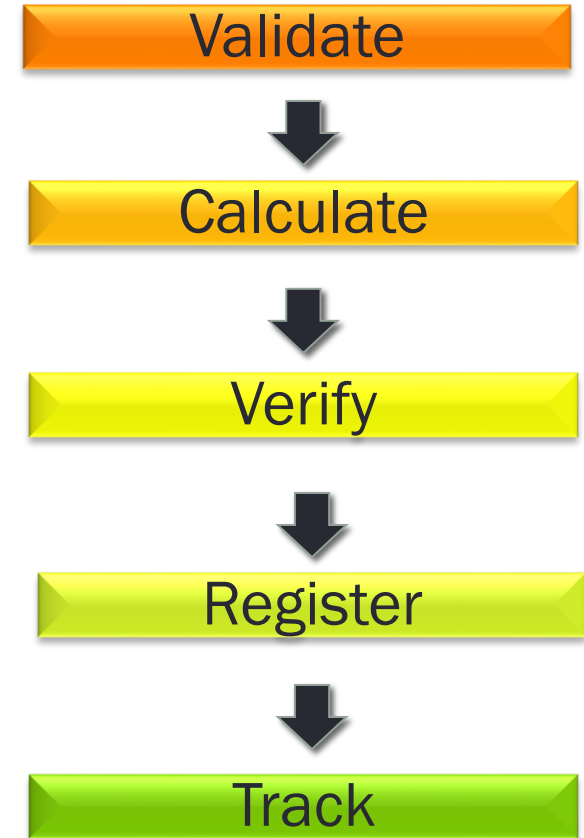
Verify

Third Party Verification

- ☐ Eligibility
- ☐ Calculation
- ☐ On the ground

Denman Wildlife Area

Riparian revegetation





Ecosystem Crediting Platform

Welcome Bobby

[My Projects](#)

[My Account/Admin Dashboard](#)

[Add a Project](#)

[Logout](#)

[Project Information](#)

[Project Baseline](#)

[Project Design](#)

[Project Verification](#)

[Project Certification](#)

[Credit Registration](#)

[Credit Issuance](#)

[Project Monitoring](#)

PROJECT:

Denman Wildlife Refuge, Little Butt...

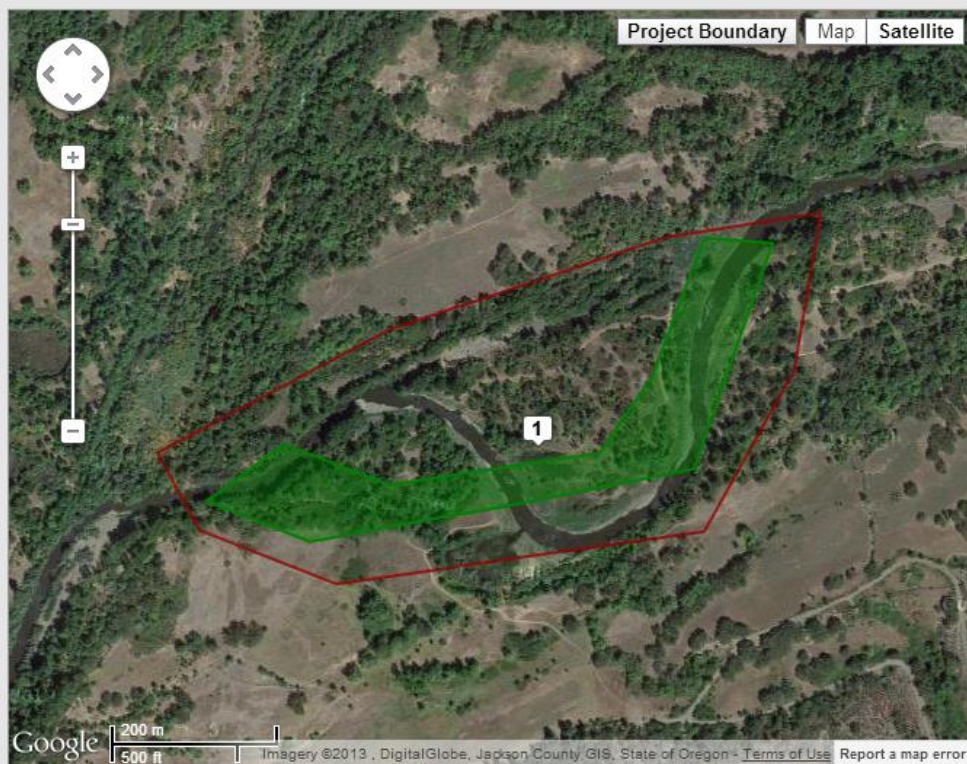
[Project Boundary](#)

[Map Units](#)

[Field Datasheets](#)

[Baseline Data](#)

[Submit Baseline](#)



Submit Baseline

At this point, project developers should have a defined project boundary, one or more map units within that boundary, one or more credit types assigned to each map unit, completed field data sheets uploaded into the ECP that account for all credit types being generated, and entered baseline estimates for each credit type into the ECP.

Please click the "Continue" button below to submit the project's baseline information to the Local Administrator. If all the documentation and calculations are in order, you will be invited to proceed with project design. Please keep in mind that, once baseline conditions have been approved, they may not be altered by the project developer without the assistance of the Local Administrator.

COTE: Temperature Credit

BASILINE SCORE
56,246,103.00 Kcal/day

COTE: Nutrients Credit: Nitrogen

BASILINE SCORE
103.00 lbs per year

COTE: Nutrients Credit: Phosphorus

BASILINE SCORE
6.00 lbs per year

COTE: Nutrients Credit: Sediment

[Continue](#)

Lessons Learned

From those early pilots

- PROGRAMS EVOLVE IN PHASES: feasibility, convening, design, and operation
- DEMAND IS LIMITING FACTOR
- TRANSACTION VOLUME IS “THIN”
- STATE AGENCIES ARE KEY
- LOCAL PROGRAMS NEED A LOT OF THE SAME THINGS: There are a lot of consistent needs, but local stakeholders need to “own” their design decisions



JOINT REGIONAL AGREEMENT

WHY BEST PRACTICES? WHY NOW?

- We've learned a lot, but a lot of missing information;
- Increasing interest in and scrutiny of trading;
- Timing is right for principles of quality and consistency;
- More consistency can reduce start-up headaches and make it easier to sustain programs over time.



JOINT REGIONAL AGREEMENT

PROJECT GOALS

- Define the best practices in trading necessary to achieve water quality and ecological goals;
- Ensure credibility and transparency in trading programs so they operate as promised over time;
- Increase consistency across states, which helps with both credibility and more efficient implementation.

JOINT REGIONAL AGREEMENT

PROJECT OUTPUTS

- Points of consensus across Northwest states that will define a common framework under which trades should occur;
- Shared principles and authorities language clarifying where there is room for trading under the Clean Water Act (Tier I)
- Common sets of procedures and standards to guide trading (Tier II);
- Unique trading program elements designed for each state (Tier III).
- National networking for consistency and quality

Trading Best Practices Outline

1. Regulatory instruments to support trading
2. Eligibility
3. Baseline & additionality
4. Credit quantification
5. Ratios
6. Credit characteristics
7. Credit verif. and certif.
8. Credit registration
9. Project site monitoring and record keeping
10. Compliance & enforcement
11. Program effectiveness and adaptive management

Project timeline

- Project kickoff: Nov 2012-Mar 2013
- Interagency workshops (4): Mar 2013-Nov 2013
 - Finalize draft best practices: Nov 2013
- State-level engagement: Nov 2013-Sept 2015
- Pilot testing best practices: Nov 2013-Nov 2014
 - States take next steps: Nov 2014- Sept 2015

Perspective from DEQ



- **Why DEQ is involved in the Joint Regional Agreement**
- **Update on trading**



THANKS!

DOCUMENTS AND UPDATES AVAILABLE AT:

[HTTP://WILLAMETTEPARTNERSHIP.ORG/JOINT-REGIONAL-AGREEMENT-ON-WATER-QUALITY-TRADING-2/JOINT-REGIONAL-AGREEMENT-ON-WATER-QUALITY-TRADING](http://willamettepartnership.org/joint-regional-agreement-on-water-quality-trading-2/joint-regional-agreement-on-water-quality-trading)